



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

AK

AK

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

08/612,969 03/04/96 NUSSER

D 1231-12

EXAMINER

MMC2/0315

CHARLES W CALKINS
PETREE STOCKTON L.L.P.
1001 WEST FOURTH STREET
WINSTON SALEM NC 27101

NGUYEN, A	
ART UNIT	PAPER NUMBER

2854

29

DATE MAILED:

03/15/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.
08/612,969

Applicant(s)
Dennis W. Nusser

Examiner
Anthony Nguyen

Group Art Unit
2854



☒ Responsive to communication(s) filed on Jan 16, 2001

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-19, 21-25, 27, and 28 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-19, 21-25, 27, and 28 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2854

The request filed on January 16, 2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No.08/612969 is acceptable and a CPA has been established. An action on the CPA follows.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19, 21-25,27 and 28 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Herzog et al. (US 4,669,903) in view of Wang (US 5,334,976).

Herzog et al. teaches an input apparatus having substantially the structure as claimed. Herzog et al. teaches a keyboard having a plurality of keys which generate input signals including a plurality of numerals and letters which are arranged in "QWERTY" and "DVORAK" layouts as shown in Figs.1 and 2 of Herzog et al. Herzog et al. fails to state or teach clearly the vertical and horizontal spacings between the keys. However, Wang teaches an input apparatus having a plurality of keys in which a minimum center-to-center horizontal spacing in the range of 12-19 mm and a vertical spacing of 18-21 mm for the keys such as Shift, Control and Alter (Wang, the paragraph bridging cols.4 and 5 and col.5 second paragraph). Note that the spacing is obviously smaller for the alphanumeric keys 26-28 as shown in Fig.1 of Wang. Note also that the widths

Art Unit: 2854

and depths of the keys of a standard keyboard is about 12 mm which is also in the range as claimed. In view of this teaching of Wang, it would have been obvious to one of ordinary skill in the art to modify the keyboard of Herzog et al. by providing the minimum center-to-center horizontal and vertical spacings between the input keys as taught by Wang for ease of typing. With respect to claims 1,21,22,23 and 27, the selection of a desired keystroke travel range involves only an obvious matter of design choice based upon obvious experimentation. This obviousness is evidenced by the fact that applicant recognizes that the conventional keystroke travel range is about 1.5-6 mm (the specification, page 10 lines 20-24). With respect to claims 6,14,18,23 and 25, the functions to be used in the input apparatus as recited are well known in the art as exemplified by Wang and Herzog et al.

Applicants' arguments filed on June 22, 1999 have been fully considered but they are not persuasive of any error. Applicant argues that Wang, Herzog et al., and Klauber fail to teach the fixed key input apparatus as claimed. However, as explained above, Herzog et al. teach a keyboard including alpha-numeric keys which are arranged in "QWERTY" and "DVORAK" layouts. Wang teaches a keyboard including keys which generate input signals of numerals, letters and symbols as recited. The keys of Wang have minimum center-to-center horizontal and vertical spacings in the range as claimed. Note also that the recited horizontal and vertical spacings are also rendered obvious with respect to the horizontal and vertical spacings of a conventional keyboard. Thus, it is believed that the rejections are proper. There is no apparent unobviousness in the structure claimed relative to the structure of the prior art as applied.

Art Unit: 2854

This is a CPA of applicant's earlier Application No. 08/612969. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (703) 308-2869. The examiner can normally be reached daily from 9 AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hilten, can be reached on (703) 308-0719. The fax phone number for this Group is (703) 308-5841 and 308-7722.

Application/Control Number: 08/612969

Page 5

Art Unit: 2854

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Encl.

AH N
March 12, 2001


JOHN S. HILTEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800